UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,613	01/28/2004	Niel Robertson	NEWM-001/01US 301711-2002	3415

22903   7590   08/28/2007
COOLEY GODWARD KRONISH LLP
ATTN: PATENT GROUP
Suite 500
1200 - 19th Street, NW
WASHINGTON, DC 20036-2402

EXAMINER
VU, TUAN A

ART UNIT	PAPER NUMBER
2193	

MAIL DATE	DELIVERY MODE
08/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/766,613	ROBERTSON ET AL.
	Examiner	Art Unit	
	Tuan A. Vu	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>15 June 2007</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 20070823

DETAILED ACTION

1.   This action is responsive to the Applicant's response filed 6/15/07.

As indicated in Applicant's response, no claims have been amended. Claims 1-19 are

pending in the office action.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-11, 15, 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by

Bischof et al., USPubN: 20040041827 (hereinafter Bischof).

As per claim 1, Bischof discloses a method for managing testing scripts used to test an

application, the method comprising:

selecting test scripts (e.g. Scripting Engine 250 – Fig. 2; para 0035-0038, pg. 4-5 – Note:

scripting engine per client to instantiate plurality of scripting processes reads on selection of test

script per one user), wherein each test script corresponds to auxiliary data items (Fig. 4);

storing data that associates the selected test scripts with their corresponding auxiliary

data items (e.g. meta data 262 Fig. 2; Generate abstract representation 450 – Fig. 4; para 0037,

pg. 5; *scripting* - para 0043-0044, para 0046, pg. 5-6; listing 3 -pg. 7-12);

receiving an indication that one of the auxiliary data items has been altered (e.g. para

0039-0040, pg. 5);

searching the stored data (e.g. para 0039, pg. 5) to identify the test scripts (e.g. each

scripting process 325, 350 detect changes - para 0039-0040, pg. 5; *scripting engine 440*, para

0046, pg. 12) that correspond with the altered one of the auxiliary data items; and

generating an indication of the identified test scripts (e.g. para 0040, pg. 5;

UserChangeState - Fig. 5 – Note: any manifestation of a change reads on generating an

indication).

As per claims 2-3, Bischof discloses recording a user's interaction with the application,

thereby generating a test script (detect user actions 440 – Fig. 4; Fig. 5-6; *scripting engine 440*,

para 0046, pg. 12); recording default values relied upon by the application during a user's

interaction with the application, wherein the default values (e.g. *elementFormdefault =*

"qualified"....use= "required" default = "true" – Listing 3, pg. 7) are included with the test

script (e.g. *A command interface ... assign ... default values ... test scripts* - para 0046, pg. 13).

As per claim 4, Bischof discloses recording auxiliary data (para 0046 – pg. 12-13)

corresponding to a user's interaction with the application.

As per claim 5, Bischof discloses XML to represent auxiliary data in a network base

paradigm involving front end, middleware and back end components (see para 0058-0059, pg.

14; Fig. 2; para 0030, pg. 3) wherein script-generating application is Browser/GUI-based and

utilizes metadata stored in a database serving a support reusable knowledge for further

application build (para 0027-0028, pg. 3; *previously generated abstract representation* - para

0038, pg. 5); i.e. database for storing reusable GUI objects for a multi-platform network-based

replay tool (para 0015, pg. 2; Fig. 3), the GUI object abstracted into markup elements needed to

support the different versions of script and creation thereof in multi-platforms(see *database, file*

system - para 0059-0060, pg. 14), hence has disclosed file system or database query to retrieve

the recorded auxiliary data (see XML format of pg. 6-10 in file system of para 0059-0060) for

reuse in each script build.

As per claim 6, Bischof discloses recording the auxiliary data comprises querying a

auxiliary data file (e.g. *file system* – para 0060, pg 14) that includes the auxiliary data.

As per claim 7, Bischof discloses calling an API that can return the auxiliary data (refer

to the database query of claim 5, i.e. a query to a database or a file system reads on the presence

of a API to effect such remote/interface call from where the replay tool application – see Fig 3 --

is located with respect to a database or file system layer – see *transmitted ... application

program 300* - para 0036, pg. 4).

As per claim 8, Bischof discloses storing a database and querying of support GUI objects

stored as XML representation as recorded the auxiliary data (re claim 5), Web-based network,

use of middleware, using remote call to a service (see *middleware* -para 0058-0059, pg. 14; Fig.

2; para 0030, pg. 3; para; *requests ... server* – para 0032, pg. 4) to obtain remote data storage;

hence has disclosed querying a Web service that can return the auxiliary data.

As per claim 9, Bischof discloses tagging user interface objects (pg. 7-10 – Note: Gui

objects being defined and formatted in a XML reads on tagging GUI objects) that the user

interacts with when operating the application (see Fig. 2-3) and mapping the tagged elements

(e.g. validation of typed parameters – see para 0015, pg. 2; para 0038-0039, pg. 5; *Tag

determining ... be considered on replaying* – Listing 3, top, pg. 7) with their corresponding

auxiliary data items.

As per claims 10-11, Bischof discloses storing a record of each auxiliary data item and the test script with which it is associated (; *previously generated abstract representation* - para 0038, pg. 5; XML format of pg. 6-10 in file system of para 0059-0060, pg. 14; version script – para 0026-0028, pg. 3); storing a record of each test script and the corresponding auxiliary data items (e.g. para 0059-0060, pg. 14; *stores ... scripts for later use* - para 0033, pg. 4).

As per claim 15, Bischof discloses a method for managing testing scripts used to test an application, the method comprising:

selecting user-interface objects (e.g. Scripting Engine 250 – Fig. 2; para 0035-0038, pg. 4-5), wherein each user-interface object corresponds to auxiliary data items;

storing data (meta data 262 Fig. 2; Generate abstract representation 450 – Fig. 4; para 0037, pg. 5; *scripting* - para 0043-0044, para 0046, pg. 5-6; listing 3 -pg. 7-12) that associates the selected user-interface objects with their corresponding auxiliary data items;

receiving an indication that one of the auxiliary data items has been altered (e.g. para 0039-0040, pg. 5);

searching the stored data to identify user-interface objects that correspond with the altered one of the auxiliary data items; and generating an indication of the identified user-interface objects (e.g. para 0039, pg. 5; each scripting process 325, 350 detect changes - para 0039-0040, pg. 5; *scripting engine 440*, para 0046, pg. 12; para 0040, pg. 5; *UserChangeState* - Fig. 5);

all of which limitations having been addressed in claim 1, respectively.

As per claim 18, Bischof discloses a system for managing testing scripts used to test an application, the system comprising a processor; a memory device; a plurality of instructions stored on the memory device, the instruction configured to cause the processor to:

select test scripts, wherein each test script corresponding to auxiliary data items;

store data that associates the selected test scripts with their corresponding auxiliary data items; process an indication that one of the auxiliary data items has been altered;

search the stored data to identify the test scripts that correspond with the altered one of the auxiliary data items; and

generate an indication of the identified test scripts; all of which limitations having been addressed in claim 1, respectively.

As per claim 19, Bischof discloses a system for managing testing scripts used to test an application, the system comprising: means for *selecting* user-interface objects, wherein each user-interface object corresponds to auxiliary data items; means for *storing* data that associates the selected user-interface objects with their corresponding auxiliary data items; means for *receiving* an indication that one of the auxiliary data items has been altered; means for *searching* the stored data to identify user-interface objects that correspond with the altered one of the auxiliary data items; and means for *generating* an indication of the identified user-interface objects (Refer to claim 1 for corresponding rejection for the steps of *selecting, storing, receiving, searching,* and *generating*)

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 12-14, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bischof et al., USPubN: 20040041827.

As per claims 12-14, Bischof does not explicitly disclose prompting a user to generate a new test script to test the altered one of the auxiliary data items, to alter a test script to test the altered one of the auxiliary data items, and to remove a test script if the objects it tests have been deleted from the auxiliary data items. However, Bischof teaches a GUI tool enabling the user to identify changes to a collection of actions previously recorded (see para 0039, pg. 5) and providing means for user to input commands or implementing alterations to the script (see para 0040-0041, pg. 5; Fig. 2), i.e. accommodating to state changes against the auxiliary data. Based on a GUI where user inputs dictate control to the changes (see para 0054 pg. 14; para 0014, pg. 2) made to the script based on state changes as above mentioned, it would have been obvious for one skill in the art at the time the invention was made to provide Bischof's replay tool with a visual prompt or a GUI pop-up (see Bischof: *If available ... displayed message* - pg. 11, bottom Listing 3) enabling the user to effect changes to the script according to changes detected to the auxiliary data, e.g. recreate a script via a session object, modify a script for retest, or to discard an non-reusable script, so that newest, fault-free reusable script can be kept on record so to provide proper support for subsequent reuse as contemplated by Bischof (para 0059-0060, pg. 14; *stores ... scripts for later use* - para 0033, pg. 4; *updated ... new test script* – para 0025-0026, pg. 3; para 0015, pg. 2)

As per claims 16-17, for the prompting limitation, refer to the rationale of claims 12-13, respectively (Note: create a session new object to enable a retest is analogous as using this new instance of session to enable a new test script be created).

Response to Arguments

6. Applicant's arguments filed 6/15/07 have been fully considered but they are not persuasive. Following are the Examiner's observation in regard thereto.

Claim Objections:

(A) Applicants have pointed some action of *flagging* and *recording* (Appl. Rmrks pg. 2-3) in the Specifications (para 0029-0034) to provide supporting evidence for what appears to be a hard to understand phraseology (previously **objected to** for not really reflecting the teaching of the Disclosure) of the claim language. The objection is for the time being withdrawn. However, the objected to phrase is considered a very awkward construct in that it utilizes 'indication' in a *generating* context phrased as 'generating an indication of the identified user-interface objects', whereas a proper construct, among others, should have been: 'generating an indication that the identified ... objects have been altered' or 'generating a recording that the ... objects have been identified as being modified' or 'generating an identification indicating that ... the objects have been altered'. Indeed, *flagging* or *recording* (as evidenced above) a changing state of some objects being identified when a parsing/processing a script could not reasonably be bluntly phrased as 'generating an identification of the identified test scripts', because this does not remotely accomplish a straightforward and understandable semantic construct, i.e. without undue researching in the Specifications in the hope for being taught on what that phrase really means. Discretion falls back on the Applicants to the effect of straightening the above claim language in

order to put forth what this potentially inventive step (*generating an indication*) is really all about; and it is reminded that the claim language has to be clear of ambiguity and indefiniteness **on its own** before any patentability matter can be possibly identified. Absent anywhere in the Specifications about an explicit term 'indication', and notwithstanding the fact that the Specifications will not be read into the claims, the above awkward phraseology has been interpreted (emphasis added) as following: some indication to the effect of identifying some data/part related to the scripts/objects is generated for prosecuting claim merits.

35 USC 102(e) Rejection:

(B)   Applicants characterize the cited parts of the Office Action in Fig. 4 as not teaching and suggesting test scripts (corresponding ... auxiliary data) as claimed in claim 1(Appl. Rmrks pg. 3, bottom, pg. 4, 2nd para). In compliance with CFR § 1.111(b), Applicants, in the attempt to show how the language phrased as 'test script corresponds to auxiliary data items' distinguishes over the user's directives cited in Figure 4, have alleged that these directives are not what the above phrase requires. The Office addresses the above argument only to the extent of the CFR-complying part of the argument to overcome a cited portion of Bischof; and based on the above, it is respectfully deemed that the argument is not convincing. First, the portions cited are described at length in Bischof as directives of a user's scripting instance implemented via a GUI-based process, wherein each instance thereof would qualify as one script. That is, the claim does not specify that a test script cannot be a console or GUI driven scripting process nor does it provide any teaching about a nature of any testing step; thus, *test script* has been met by the Bishop's scripting instance (including the directives) as cited. Second, there is no teaching in the claim about what this 'corresponds to auxiliary data items' really amounts to; hence this

association between 'test script' and 'auxiliary data' are vaguely defined and thus interpreted

with **broadest** connotation as permissible. Therefore, when Bischof describes a GUI tool

whereby scripting elements such as *properties* or *collection of methods* (i.e. *auxiliary data items*)

which implement the GUI scripting application, and wherein each scripting process (see para

0039, pg. 5) can yield the indication that some state related to the above components has

changed, it is deemed that Bischof has disclosed test script processes and related components to

correspond with said (test) script instance and during each such process, i.e. Bischof has taught

correlating the scripting instance and the changing state of the components ('auxiliary data

items') that basically would implement the script; that is, 'generating indication of the identified

test scripts', such test script corresponding (*each test scripts corresponds*) to the auxiliary data

items. It is deemed that in response to Applicants' argument under CFR § 1.111(b), the cited

portions of Bischof have fulfilled the questioned claim portions as put forth in the argument.

(C)   Applicants have submitted that because Bischof discloses tracking and recording changes

in the state of a UI element, Bischof does not disclose 'receiving an indication that one of the

auxiliary data items has been altered (Appl. Rmrks pg. 4, 3rd para). 'Indication' has been treated

as a tangible piece of communicating data such that when perceived, indicates that some event

has happened or some action is to be considered. Bischof uses a GUI tool to visibly inform on

the altered state of some properties or components ('auxiliary items') as these (refer to section A)

are dynamically retrieved and detected as having been altered within the GUI-based build

context of the scripting process. Such piece of information indicating to the GUI user that

'auxiliary data' have been altered does meet what is construed as 'receiving an indication ... has

been altered'; and the above argument is not sufficient to reverse Bischof and the corresponding

grounds of rejection.

(D)   Applicants have submitted that because Bischof is concerned with tracking and recording

changes in the state of a UI element, Bischof does not disclose 'searching the stored data to

identify ... scripts that correspond with ... data items' (Appl. Rmrks pg. 4, bottom). The act of

identifying test scripts in conjunction with dynamically perceiving from the tool by Bischof to

the effect that the retrieved 'auxiliary items' have been altered also signifies identifying a state of

a script for which its corresponding implementation components have changed and thus need to

be readapted; i.e. this state change being tangibly communicated to the user would serve as GUI

event triggering action to provide newer values (see Bischof: para 0040, pg. 5); hence the

indication effectuated in the course of searching (i.e. searching of stored items) in order to

correspond a dynamic instance of script with its associated altered components has disclosed

identifying said instance of script via receiving visible indication. In light of the interpretation of

the claim and the subsequent mapping from Bischof, it is deemed that Bischof has taught the

above limitation; thus, the above argument is not sufficient to reverse Bischof and the

corresponding grounds of rejection.

(E)   Applicants have submitted that for claim 15, the Office Action has missed addressing all

the steps of this claim because they differ from claim 1 (Appl. Rmrks pg. 5, middle). The user-

interface objects have been interpreted in light of broadest interpretation; and such objects

implicate but a multitude of GUI elements, such that when a scripting process instance by

Bischof is created in order to retrieve auxiliary data thereof (see Bischof: para 0039-0042) the

very instance of a script as taught reads on such UI objects, absent any further details in the

claim to further narrow on the nature of such objects. Thus, it is reasonable to say that applying

the corresponding cited portions of claim 1 to claim 15 still addresses what appears to be a mere

form difference between 'test scripts' and 'UI objects' (or what can be interpreted therefrom)

when in fact UI objects is a superset of 'test script'. The rejection of Claim 15 is deemed proper

based on broad interpretation of what appears to be an even broader recital of claim 1.

(F)   Applicants have submitted that for claims 18 and 19, the Office Action fails to address all

the limitations of these claims (Appl. Rmrks pg. 5-6), in part based on the argument concerning

claim 15. These allegations for patentability does not fulfill the required format of CFR §

1.111(b) according to which specific parts of the claim (or claims) have to be identified along

with the (reference) cited parts of the rejection, and analysis to the effect of explaining properly

how the claim specific language distinguishes over those corresponding cited portions has to

been set forth in a form that would reasonably show deficiency in pertinent part of the Office

Action. For claim 19 (a mere Beauregard version of claim 1), refer to the reply for rebutting the

argument against the impropriety of claims 1 and 15 part of the Office Action.

(G)   In all, including the 103 rejected claims, the arguments are not sufficient to overcome the

Office Action as set forth above, and the claims will stand rejected accordingly.

Conclusion

7.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The

examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (571)272-3756.

The fax phone number for the organization where this application or proceeding is

assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before

using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-

272-3609.

Any inquiry of a general nature or relating to the status of this application should be

directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan A Vu
Patent Examiner,
Art Unit 2193
August 23, 2007